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EXAMINER

THEIN, MARIA TERESA T

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/909,686

Filing Date: July 20, 2001

Appellant(s): AYALA ET AL.

Steven R. Bartholomew
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 6, 2007 appealing from the Office action mailed April 6, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is partially correct, however this Examiner's Answer includes the following **new grounds of rejection.**

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, claims 1-7 are non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101. *Note the Board of Patent Appeals Informative Opinion Ex parte Langemyer et al.*

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(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,006,196	FEIGIN ET AL.	12-1999
H1743	GRAVES ET AL.	8-1998
2002/0072986	ARAM	6-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008);

Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780, 787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, claims 1-7 are non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101. *Note the Board of Patent Appeals Informative Opinion Ex parte Langemyer et al.*

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 6-7, 9-10, 13-18, 22-23, 25-26, and 29-32 are rejected under 35 U.S.C.

103(a) as being unpatentable over U.S. Patent No. 6,006,196 to Feigin et al. in view of U.S.

Statutory Invention Registration No. H1743 to Graves et al.

Regarding claims 1, 9, 14-17, and 29-32, Feigin discloses a computer- implemented method and a storage medium encoded with machine- readable computer program code for managing inventory comprising: receiving an updated demand forecast and updated demand forecast (col. 5, lines 49-col. 6, line 2; col. 2, lines 22-52); selecting a search criteria for determining projected periods of supply (col. 3, lines 19-25; col. 5, lines 39-43); and; determining for a given time period: projected inventory level using the projected data, supplier commitment data, and prior periods' projected inventory levels; and projected days of supply of inventory using the projected inventory level for a current item period and projected forecast data for subsequent periods (col. 6, lines 3-17; col. 7, lines 57-col. 8, line 3).

Feigin does not explicitly disclose extracting current data related to said search criteria, the current data including supplier commitment data; the data including a quantity of said stock item expected to be consumed during at least one of said number of specified time periods and when said projected days of supply is out of a predetermined range for a given time period, taking a corrective action; and the projected days of supply is measured in time increments including one of days, weeks, and months (**claims 9 and 29**); the corrective action includes modifying the supplier commitment data, delaying a shipment, and increasing the supplier commitment data (**Claims 14-16 and 30-32**). Feigin discloses the management of inventory that comprises a distribution resource-planning engine (DRP) (Col. 1, lines 7-10). The DRP

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comprises an input means for inputting to the engine information derived from a database, a forecasts engine, and an inventory planning engine comprising inventory status, planning parameters, and demand forecasts; a logic means; and an output means for output means (col. 2, lines 37-52).

Graves, on the other hand, teaches extracting current data related to said search criteria, the current data including supplier commitment data (col. 10, line 59- col. 11, line 9; col. 14, lines 5-13; col. 17, lines 28-59); the data including a quantity of said stock item expected to be consumed during at least one of said number of specified time periods and when said projected days of supply is out of a predetermined range for a given time period, taking a corrective action; and the projected days of supply is measured in time increments including one of days, weeks, and months (**claims 9 and 29**); the corrective action includes modifying the supplier commitment data, delaying a shipment, and increasing the supplier commitment data (**Claims 14-16 and 30-32**) (col. 2, lines 29-34; col. 2, lines 63 – col. 3, line 6; col. 3, lines 48-65; col. 4, lines 57-62; col. 6, lines 50-55; col. 10, lines 59-67; col. 11, lines 1-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method and storage medium encoded with machine-readable program of Feigin, to include extracting current data related to said search criteria, the current data including supplier commitment data; the data including a quantity of said stock item expected to be consumed during at least one of said number of specified time periods and when said projected days of supply is out of a predetermined range for a given time period, taking a corrective action; and the projected days of supply is measured in time increments including one of days, weeks, and months; the corrective action includes modifying the supplier commitment

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data, delaying a shipment, and increasing the supplier commitment data, as taught by Graves, in order to provide a mechanism by which the delivery of new, replacement supplies can be shifted forward or delayed (Graves col. 1, lines 37-39), thus providing an automatic ordering method in which new supplies are ordered with minimum human intervention (Graves, col. 1, lines 48-50).

Regarding claims 2, 6-7, 13, 18, 22-23, and 25, Feigin the given time period is established by at least one of a supplier and manufacturer (Figure 1; col. 5, lines 35-48; col. 6, lines 3-18); the number of convenient time periods includes selected horizon (col. 3, lines 19-52 col. 6, lines 3-18); the number of convenient time periods is measured in increments of time, the increments include one of: days, weeks, and months (col. 3, lines 28-35); the supplier commitment data includes a quantity of said stock item a supplier commits to provide for a manufacturer; (col. 3, lines 28-35).

Regarding claims 10 and 26, Feigin discloses the supplier commitment data includes a quantity of the stock item a supplier commits to provide for a manufacturer (col. 3, line 54 – col. 4, line 22); the determining for a given time period the projected inventory level include performing a calculation comprising:

$PI(n) = PI(n-1) - F(n-1) + C(n-1)$, wherein further PI represents a projected inventory value; n represents a variable, the variable representing a time period; F represents a projected forecast value; and C represents a supplier commitment value. (col. 3, line 20 – col. 4, line 21; col. 6, lines 3-17).

Claims 3-5, 11-12, 19-21, 27-28, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,006,196 to Feigin et al. and U.S. Statutory

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Invention Registration No. H1743 to Graves et al as applied to claims 1 and 17 above, and further in view of U.S. Patent Application Publication No. 2002/0072986 to Aram.

Regarding claims 3-5, 11-12, 19-21, and 27-28, Feigin and Graves substantially discloses the claimed invention, however, the combination does not explicitly disclose providing a search criteria including a part number identifying the stock item (**Claims 3 and 19**); part name identifying the stock item (**Claims 4 and 20**); part description identifying the stock item (**Claims 5 and 21**); the predetermined range for the projected says of supply is established by at least one of manufacturer, and a supplier (**Claims 11 and 27**); the predetermined range for the projected says of supply is a single number (**Claims 12 and 28**). The combination discloses the management of inventory that comprises a distribution resource planning engine (DRP) (Feigin, col. 1, lines 7-10). The DRP comprises an input means for inputting to the engine information derived from a database, a forecasts engine, and an inventory planning engine comprising inventory status, planning parameters, and demand forecasts; a logic means; and an output means for output means (Feigin, col. 2, lines 37-52).

Aram, on the other hand, teaches providing a search criteria including a part number identifying the stock item (**Claims 3 and 19**) (abstract); part name identifying the stock item (**Claims 4 and 20**) (abstract); part description identifying the stock item (**Claims 5 and 21**) (abstract); the predetermined range for the projected says of supply is established by at least one of manufacturer, and a supplier (**Claims 11 and 27**) (paragraphs 150-151); and the predetermined range for the projected says of supply is a single number (**Claims 12 and 28**) (paragraphs 150-152) (paragraphs 150-152) .

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination, to include providing a search criteria including a part number, name, description; and the predetermined range for the projected says of supply is established by at least one of manufacturer, and a supplier, as taught by Aram, in order to avoid the risk of letting down a customer by not fulfilling an order (Aram paragraph 150).

Regrinding claims 33-34, Feigin and Graves substantially discloses the claimed invention, and specifically the projected period or time of supply is determined for each time period by performing the calculation of a projected period of supply value, as recited in the claim (Feigin, the objective of DRP logic is to project, for the product and location of interest the following quantities for all future periods, col. 3, lines 31-34). However, the combination does not explicitly disclose the period or time is day.

Aram, on the other hand, discloses the period or time is day in calculating a period of supply value (paragraph 113; paragraph 143; paragraph 145)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination, to include the period or time is day in calculating a period of supply value, as taught by Aram, in order to facilitate improved planning ahead (Aram, paragraph 6) thus providing an efficient operation (paragraph 6).

(10) Response to Argument

Appellants remark that “Feigin in view of Graves do not render claims 1 and 17 obvious because they fail to teach, suggest, or render obvious at least the element selecting a search criteria for determining projected days of supply”.

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The Examiner does not agree. The combination of Feigin and Graves teaches and suggest, "selecting a search criteria for determining projected days of supply". Feigin discloses Distribution Resource Planning (DRP) logic, which provides estimates of at least one of projected future on-hand inventory and replenishment requirements of a specific product (col. 2, lines 27-31). The DRP engine includes an input means for inputting to the engine information derived from a database, a forecast engine and an inventory planning engine that comprises inventory status, planning parameters, and demand forecasts; a logic means; and an output means for outputting estimates of at least one of future replenishment requirements and inventory levels of a specific product (col. 2, lines 36-53). DRP logic involves the recursive calculation of the replenishment requirements, on-hand inventory, and backordered demand in the future for a specific product at a specific location (col. 3, lines 21-25). The first step in describing recursion is to device the future time into a set of discrete period of equal length, indexed by $t=1,2,\dots,n$, where n is the time horizon of interest (col. 3, lines 24-27). Feigin discloses that the objective of DRP logic is to project for the specific product (search criteria), the following quantities for all future periods (col. 3, lines 31-34). The projected quantities for all future periods include the on-hand inventory, the backordered demand, the required quantity of product needed, and the recommended quantity (col. 3, lines 34-45). Graves was cited for teaching the projected days of supply. Graves teaches an inventory management system, which determines the period of time until the stored supplies are depleted that is based upon historical data related to the rate of usage of the supplies (Abstract). For example, the inventory management system predicts storage tank product levels, based on forecasted and actual usage rates that can be based on a predetermined day of the week (col. 10, lines 59-63)

Such Distribution Resource Planning (DRP) logic of Feigin, which involves the recursive calculation of the replenishment requirements, on-hand inventory, and backordered demand in the future for a specific product; recursion which is to device the future time into a set of discrete period of equal length; the objective of DRP logic is to project, for the specific product (search criteria), the following quantities for all future periods, which include on-hand inventory, the backordered demand, the required quantity of product needed, and the recommended quantity; and the inventory management system of Graves which determines the period of time until the stored supplies are depleted that is based upon historical data related to the rate of usage of the supplies, the predetermined time period can be days are considered “selecting a search criteria for determining projected days of supply”.

Appellants remark that “Feigin in view of Graves do not render claims 1 and 17 obvious because they fail to teach, suggest, or render obvious at least the element extracting current data related to said search criteria”.

The Examiner does not agree. The combination of Feigin and Graves discloses the “extracting current data related to said search criteria”. Feigin was cited for teach the search criteria being the specific product. Furthermore, Feigin discloses Distribution Resource Planning (DRP) engine which includes an input means for inputting to the engine information derived from a database, a forecast engine and an inventory planning engine that comprises inventory status, planning parameters, and demand forecasts; a logic means; and an output means for outputting estimates of at least one of future replenishment requirements and inventory levels of a specific product (col. 2, lines 36-53). The objective of DRP logic is to project for the specific

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product (search criteria), the following quantities for all future periods (col. 3, lines 31-34). The projected quantities for all future periods include the on-hand inventory, the backordered demand, the required quantity of product needed, and the recommended quantity (col. 3, lines 34-45). Graves was cited for teaching the “extracting current data related to said search criteria”. Graves teaches an inventory management system which includes a processing unit that receives a predetermined signal to determines usage information of the consumable supplies over a predetermined period of time and the usage information being used by the processing unit to project when the consumable supplies will be completely depleted (col. 2, lines 62-67). Furthermore, the processing unit continuously receives storage tank level data and projects storage tank levels based upon usage of the chemical stored. The received data is analyzed by the processing unit to determine the rate at which the chemical is used. The determined rate of chemical usage is stored in a database to produce historical record of consumption. The processing unit receives and evaluates data on a predetermined period of time. (Col. 6, lines 37-46) Using forecasting algorithms, examining the quantity of chemical used over a predetermined period of time, the amount of chemical to be used during a future predetermined time period can be estimated (col. 6, lines 50-53).

Such Distribution Resource Planning (DRP) engine of Feigin which includes an input means, a logic means, and an output means for outputting estimates of at least one of future replenishment requirements and inventory levels of a specific product; the objective of DRP logic is to project for the specific product (search criteria), the following quantities for all future periods; the inventory management system of Graves which includes a processing unit that receives a predetermined signal to determines usage information of the consumable supplies over

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a predetermined period of time and the usage information being used by the processing unit to project when the consumable supplies will be completely depleted; and using an algorithm by examining the quantity of chemical used over a predetermined period of time, the amount of chemical to be used during a future predetermined time period can be estimated are considered “extracting current data related to said search criteria”.

Appellants remark pertaining to claims 2, 6-7, 9-10, 13-16, 18, 22-23, 25-26, and 29-32.

Claims 2, 6-7, 9-10, 13-16, 18, 22-23, 25-26, and 29-32 are dependent on claims 1 and 17, all claims stand or fall based on the decision of claims 1 and 17.

Appellants remark pertaining to claims 3-5, 11-12, 19-21, 27-28 and 33-34.

Claims 3-5, 11-12, 19-21, 27-28 and 33-34 are dependent on claims 1 and 17, all claims stand or fall based on the decision of claims 1 and 17.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent

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applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

/Marissa Thein/

Examiner, A.U. 3627

A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:

Wynn Coggins



WYNN W. COGGINS
TECHNOLOGY CENTER DIRECTOR

Conferees:

/F. Ryan Zeender/

Supervisory Patent Examiner, Art Unit 3627

Vincent Millin



Appellate
PRACTICE
Specialist